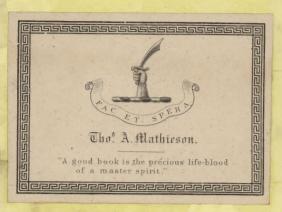
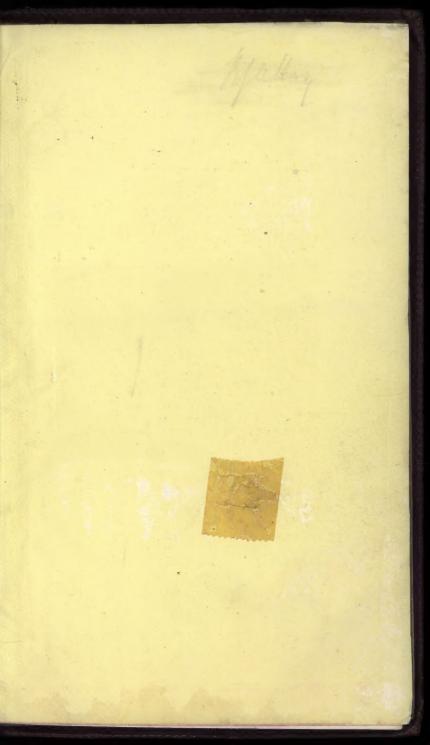
The Oxford Museum
ACLAND & RUSKIN.





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page 88.

OXFORD MUSEUM.

BY

HENRY W. ACLAND, M.D.,

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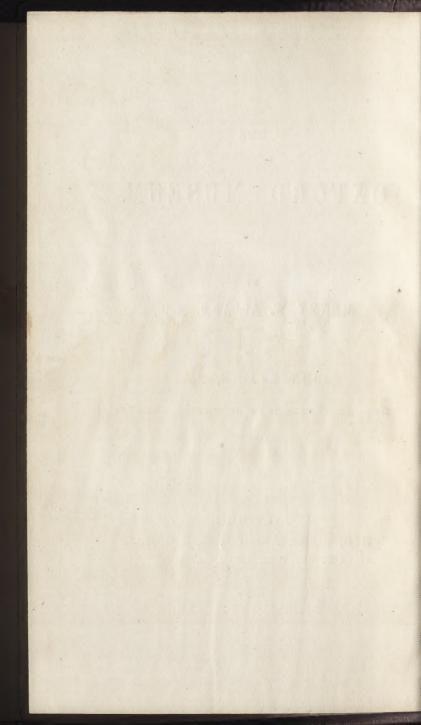
JOHN RUSKIN, M.A.,

HONORARY STUDENTS OF CHRIST CHURCH.

LONDON:

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1859.



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PREFACE.

The following pages contain the substance of a Lecture which was given, at their request, to the members of the Architectural Societies that met in Oxford in the summer of last year. Pressing duties have hindered me till now from committing to paper, as nearly as my memory serves me, the matter of what was then said. I am induced, however, thus tardily to comply with a request made by various persons, that these remarks should be printed, because visitors in Oxford frequently seek information similar to that which it was my aim then to furnish.

It is, moreover, imperative on me to give the utmost publicity I can to the letters which Mr. Ruskin has addressed to me, the first in June last, and the second in January of this year, when I informed him I was about to print the Lecture. It may seem presumptuous that I should couple my own name with his in a question which is partly one of Art; but we both feel pleasure in recording that, when fellow undergraduates at Christ Church, we sketched together; and, that after a lapse of twenty years, we received on the same day the high distinction of an Honorary Studentship; because, though following divergent paths, we have honestly and laboriously cultivated the Arts which we respectively profess. To the intercourse on Art, and many kindred subjects, which for more than twenty years I have had with the present Dean of Christ Church, with John Ruskin, Charles Newton, and George Richmond, I owe many

happy hours of rest in the midst of happy labour, and am little disposed to forego the right to seek recreation in this or any other reasonable manner, because I am a Physician. On the contrary, I here declare that, though a man may be seduced from his duty, to his after misery, by any other absorbing interest, I yet believe that frequent intercourse with men engaged in other intellectual pursuits, is, in my profession at least, almost necessary to form a complete professional mind. I appeal to History in confirmation.

But, on the other side, I should be deeply pained, if in consequence of the interest I profess in the Art of the Oxford Museum, it were supposed by any whose opinion I value, either that I consider Art a subject on which amateurs can have perfect judgment, or that it is a matter which a Physician can seriously pursue. Yet I am of opinion that it is the duty of all persons who can help true-

hearted and earnest Artists in these days, to aid in protecting them against unjust depreciation in efforts which, from many causes in this century and in our country, are necessarily, among the best men, tentative. Many have yet to learn the apparently simple truth, that to an Artist his Art is his means of probation in this life; and that, whatever it may have of frivolity to us, to him it is as the two or the five talents, to be accounted for hereafter. I might say much on this point, for the full scope of the word Art seems by some to be even now unrecognised. Before the period of printing, Art was the largest mode of permanently recording human thought; it was spoken in every epoch, in all countries, and delivered in almost every material. buildings, on medals and coins; in porcelain and earthenware, on wood, ivory, parchment, paper and canvas, the graver or the pencil has recorded the ideas of every form of society, of every variety of race and of every character. What wonder that the Artist is jealous of his craft, and proud of his brotherhood? But as I hope that the time draws nigh when the professorial staff of Oxford will include a Professor of Art, I had better desist, and leave the matter in his hands. With the Art of this building, at all events, I have nothing whatever to do, except earnestly to aid in giving fair play and full opportunity to the eminently skilful persons, Deane and Woodward, who are now executing the work. For me and my fellow-teachers there, it is a place of other work altogether; and were it not that, as a Professor, I owe duty in this thing to the University, as a Physician, I might regret every moment I had ever expended in aiding the architects in the Art part of their undertaking. In the department of Natural Science and of Medicine there is far too much yet to be done in this place, to allow any one, who

is connected with them and has a choice in the matter, either time or energy for other occupations, unless by change they bring him the rest he needs. Like all other ancient things, Medicine is undergoing a stern cross-examination; it is learning more and more that, without depending wholly on positive science for its practical Art,—a thing which never can be,—it can no longer go on without every aid that science can afford; and therefore its disciples will all welcome such a building as is the subject of this Lecture, because it bids fair in a few years to disseminate widely, among a class of influential persons not hitherto reached, a knowledge of physiological truth and the truths of nature in general: because also it will help to keep before many of our most cultivated minds, and our most influential thinkers, the principles of sanitary knowledge in all its branches. I may not here dilate on this great national question; but they who look

ahead will see, without aid from my pen, what mutual benefits will accrue from a closer union of the Sciences at the root of Medicine with the old Universities; and will further perceive that for the well-being of those very Sciences, the Practical Art which is in one sense their highest goal, must live, and make itself heard in its own peculiar notes, and strange, unwritten speech.

I must not, however, allow myself now to describe the full scope and prospects of an educational institution, such as this Museum; and yet I cannot bring to a close a preface already too long for a description which is too short, without repeating words which I ventured to use ten years ago * on this subject:—

"With respect to the proposal to add some study of the fundamental arrangements of the

^{*} See page 39 of "Remarks on the Extension of Education in the University of Oxford." Oxford: J. H. Parker. 1848.

natural world to the general education of the place, I fear that if we do not add it, we may live to see, what would be a great national evil, such knowledge substituted for our present system."

The addition has been made; the substitution is, I hope, averted. The further my observation has extended, the more satisfied I am that no knowledge of things will supply the place of the early study of Letters—"literæ humaniores." Recent changes in the French universities fully confirm this opinion. I do not doubt the value of any honest mental labour. Indeed, since the material working of the Creator has been so far displayed to our gaze, it is both dangerous and full of impiety to resist its ennobling influence, even on the ground that His moral work is greater. But notwithstanding this, the study of language, of history, and of the thoughts of great men, which they exhibit, seems to be almost necessary (as far as learning is necessary at all) for disciplining the heart, for elevating the soul, and for preparing the way for the growth in the young, of their personal spiritual life: while, on the other side, the best corrective to pedantry in scholarship, and to conceit in mental philosophy, is the study of the facts and laws exhibited by Natural Science.

H. W. A.

Oxford, Feb. 1, 1859.



THE OXFORD MUSEUM.

When a critic in Art approaches an architectural edifice, he asks, first, to what uses is this building destined?—next, how far does it in a skilful manner interweave beauty with convenience of arrangement?—and how far, subjected to the imposed conditions of climate, site, and accessibility of materials, does it express the object for which it was intended?

You, therefore, who come as critics, ask three things, and in answer, I will endeavour to state:—

1st. The circumstance's which in the history of Oxford made this effort for enlarging her means of education necessary.

2ndly. The objects which those members of the University who for many years advocated this design have steadily kept in view.

3rdly. The way in which the Architects have performed the task assigned to them.

In other words, it is my duty to relate why extension of our buildings was necessary; what is the object of that extension; and what the spirit in which the required building has been erected.

First, then, as to the causes which called for extension of the national education at Oxford in the direction of Natural Science. These must be briefly stated.

The great tide of human thought had set for centuries, and down even to the close of the Middle Ages, chiefly in the direction of speculative reasoning, poetry, or history. Many circumstances in the condition of our globe tended to repress the outbreak of inquiring and eager interest in external Nature, which about the time of the discovery of the New World dawned upon all the educated part of mankind. It is not other than both remarkable and humiliating, that some of those who studied and taught the mental science of Aristotle, or the speculative dogmas of the schoolmen, should have wholly forgotten the successful energy which Aristotle and Galen, in the very dawn of literature, had expended on investigating the laws of organic life. It is probable, indeed, that the very condition of the Church in the Middle Ages, which led men to study the Bible less and value their own fancies more, did, in fact, close their eyes to the astonishing revelations of the unwritten as well as of the written Word of God.

Oxford, "the ancient seat of learning," was not exempt from this intellectual one-sidedness. It chiefly cultivated classic lore, and pursued the metaphysical notions of the schoolmen; even these were not always taught in the far-seeing spirit of true philosophy. It has taken some centuries from the epoch of Roger Bacon, followed here by Boyle, Harvey, Linacre, and Sydenham, besides nearly 200 years of unbroken publication of the Royal Society's transactions, to persuade this great English university to engraft, as a substantive part of the education of her youth, any knowledge of the great material design of which the Supreme Master-Worker has made us a constituent part.

"The study of mankind," indeed, was "Man;" but it was Man viewed apart from all those external circumstances and conditions by which his probation on earth was made by his Maker possible, and through whose agency, for good or evil, his life here, and preparation for life hereafter, were ordained. Seeing, then, all these things, many here in Oxford, not so much by concert, as by that strange unanimity which comes to some subjects in the fulness of

their time, felt as by an instinct, that they might not rest until means for rightly studying what is vouchsafed for man to know of this universe were accorded to the youth committed to their care, and to themselves. From such causes, and from so deep convictions, has arisen the Oxford Museum.

Nor was the present an inappropriate or unexpected time for a work conceived in this temper. Oxford possessed more than the current knowledge of the day; and the light which had been brought so multifariously to bear on Nature, by many great minds in Europe, from Bacon to Cuvier, had been specially imparted to us in the first half of this century; partly by oral instruction from Kidd, Buckland, Daubeny, Walker, the two Duncans, and many others, both in their several lecture-rooms, and within the walls of old Elias Ashmole: and partly, I must add, by the various enlightened acts and wise expenditure of the

Radcliffe Trustees, who not only many years since devoted their library entirely to works on Medicine and Natural History, expending large sums, restricted only by the little fruit they bore; but have also, by the development of a first-class Observatory, and especially through the labours of Manuel Johnson, added new lustre to the University of Halley, and Bradley, and Gregory.

To enlarge, however, on all the details of this progress would be now of little interest. We look more to the future than to the past. Thankful for the benefits we have inherited, and jealous of the honour of our fathers, we, as practical men, take still deeper interest in the destiny of our children—desiring that we leave them not worse provided in the gifts of their age, than by God's mercy and the foreseeing nobleness of our forefathers, we found ourselves in those of our own.

We ask, in the SECOND place, What objects

have the promoters of the Museum kept in view while advocating its erection?

"There are two books," says Sir T. Browne, "from whence I collect my divinity; besides that written one of God, another of His servant, Nature,—that universal and public manuscript that lies expansed unto the eyes of all." In this term "Nature" are, of course, included every known and observed form of matter by which our world and its inhabitants were either made or are maintained, and whatever laws of their construction or for their maintenance have by reason been inferred. No less signification of the word Nature will in the present day be accepted; the limitation of the term History of Nature to a small portion of the biological sciences is not now, of course, admitted. But even this explanation does not adequately express the idea of the word Nature; the word implies not only the facts and the laws that have been noted in the

structure and peopling of the globe, but still more, the relation which all those facts and laws bear to each other, in one harmonious whole; and yet one step further, in some limited instances,—the first glimpses of unuttered ideas, traces (as we believe), though we see them darkly as in a mirror, of unexpressed Art of the great Artificer.

To state the divisions which have been found necessary or convenient for the purpose of student or teacher in this vast inquiry, is to enumerate the principal sciences belonging to the History of Nature, and therefore the departments to which, in the Museum, places are assigned. In these departments there are many sub-divisions; some of which are themselves already erected into great and comprehensive subjects. They cannot all be separately represented here; for this educational institution is not the effort of a great government, nor the exhibition of the scientific collections of a

nation, but an abstract, as it were, fitted for the grasp of a single person,—or a standingpoint, from whence the intelligent learner may take a general survey of a great field of knowledge, which, be his powers what they may, in his lifetime he can never completely investigate.

Our object, then, is—1st, to give the learner a general view of the planet on which he lives, of its constituent parts, and of the relations which it occupies as a world among worlds: and 2ndly, to enable him to study, in the most complete scientific manner, and for any purpose, any detailed portion which his powers qualify him to grasp.

The Astronomer, with his apparatus, may here introduce the student to the phenomena observed in that space of which we occupy an infinitesimal portion, and may explain the means and the powers by which these phenomena have been observed and can be predicted. The Professor of Geometry will be able to aid the fur-

ther explanation of those abstruse calculations, bringing his knowledge to bear upon terrestrial as well as cosmical instances. In the department of Experimental Physics, the student will, guided by his teacher, as far as they obey the hand or bend to the skill of man, submit to experiment the most general agents and powers, which are either diffused through space,-such as light; or are daily but universally needed in the organic or inorganic changes of our earth, -as water and air. The Higher Mathematical truths upon which the theories of Experimental Physics depend, can be pursued by him in the Class-Room of the Professor of Natural Philosophy. Scarcely removed from these departments, he may next examine in the Chemical laboratories those endless changes, which nature in her ordinary course, or the skill of man by contrived combinations, may bring about in the matter of which this earth is composed,-a department which has severed from itself, more

for convenience than by reason, its special school of Mineralogy. So, insensibly, but well prepared, he will approach, in the Geological collections and afterwards among the rocks themselves, the study of the development of the earth, the history of the convulsions by which it has attained its present form, the way in which its surface is disposed, and, by necessity, the characters, structure, life, origin, and decay, of its past and present inhabitants.

Without the Geologist on one side, and the Anatomist and Physiologist on the other, Zoology is not worthy of its name. The student of life, bearing in mind the more general laws which in the several departments above named he will have sought to appreciate, will find in the collections of Zoology, combined with the Geological specimens and the dissections of the Anatomist, a boundless field of interest and of inquiry, to which almost every other science lends its aid: from

each Science he borrows a special light to guide him through the ranges of extinct and existing animal forms, from the lowest up to the highest type, which, last and most perfect, but pre-shadowed in previous ages, is seen in Man. By the aid of physiological illustrations he begins to understand how hard to unravel are the complex mechanisms and prescient intentions of the Maker of all; and he slowly learns to appreciate what exquisite care is needed for discovering the real action of even an apparently comprehended machine. And so at last, almost bewildered, but not cast down, he attempts to scrutinise, in the rooms devoted to Medicine, the various injuries which man is doomed to undergo in his progress towards death; he begins to revere the beneficent contrivances which shine forth in the midst of suffering and disease, and to veil his face before the mysterious alterations of structure, to which there seem attached

pain, with scarce relief, and a steady advance, without a check, to death. He will look, and as he looks, will cherish hope, not unmixed with prayer, that the great Art of Healing may by all these things advance, and that by the progress of profounder science, by the spread among the people of the resultant practical knowledge, by stricter obedience to physiological laws, by a consequent more self-denying spirit, some disorders may at a future day be cured, which cannot be prevented, and some, perhaps, prevented, which never can be cured.

These, then, are the departments to which we assign, for mutual aid, and easy interchange of reference and comparison, a common habitation under one roof: Astronomy, Geometry, Experimental Physics, with their Mathematics; Chemistry, Mineralogy, Geology, Zoology, Anatomy, Physiology, Medicine.

In the THIRD place, we must consider the

way in which the Architects have provided for these wants.

It is quite unnecessary to describe more particularly the steps by which we obtained the design which you have come to criticise, and which is here brought to a practical result, than by saving generally, that the Professors of the subjects which I have named, having decided on the space which each required for satisfying (I am bound to say in the most limited manner consistent with efficiency) their several wants, the University decided on allowing a grant of 30,000l. for the shell of the building, leaving o future determination its interior fittings and various incidental expenses, such as warming, lighting, draining, planting, fencing, and the like. In the competition, scarce any limitation was imposed, and to style none. Thirty-two designs by anonymous contributors were sent in; the majority of the judges, after a thoroughly English battle, in which some professed advocates of Gothic architecture deprecated the application of Gothic Art to secular purposes,—thereby denying to their own style that malleability which is, perhaps, its highest prerogative,—the design, "Nisi Dominus cedificaverit domum," was accepted. Having been openly one of its warmest advocates, I have seen no reason to regret the decision of the University.

It is but just to the Architect and to the University, to say to you at once, that the task has been a difficult one. The University granted a sum, which was perhaps the most it could, in justice to other departments, afford for the proposed purpose; the sum was well known to be barely sufficient to raise a building of the cubical contents which the Professors required for their several departments; and therefore it must be admitted at once, that, without blame to either party, there is on all sides evidence,

both in material and design, of a rigorously restrained expenditure, just as in respect of material and finish the direct contrary may be noticed in another great structure, recently built for the University by my esteemed friend Mr. Cockerell—the Taylor Institution.

Once for all on the subject of cost,—a consideration of the utmost importance in the relation between employers and employed in the matter of building,—I am happy here to record that it is within my personal knowledge that extraordinary and unsparing pains have been taken by Deane and Woodward, to produce, often with great additional labour to themselves, the almost impossible combination of artistic effect and complete convenience, with most limited means.

You who bring critical faculties and a knowledge of building to bear on the subject, need scarcely be told what is here stated. It is only to be greatly regretted that a contrary opinion should have been expressed, due in part to ignorance of facts, and in part, more unfortunately still, to one or two singular miscalculations in constructing some estimates for extra work, as well as to an error in the calculated elasticity of wrought iron supports to the roof.

No Physician will probably be heard on the subject of Art, so that it were waste of time, both to you and to me, to express, even if I hold them, many opinions on this matter; but still, as one of those appointed by the University to select a design, it was my duty to satisfy myself on certain salient principles, of which I will state two.

First, That in the selection of a style for a scientific building, the first consideration with me was its practical fitness for its purpose; that, in this respect of capacity of adaptation to any given wants, Gothic has no superior in any known form of Art, of any period or

country; that this being so, it is, upon the whole, the best suited to the general architectural character of mediæval Oxford.

Secondly, That supposing Gothic to be adopted, it must in all respects adapt itself to the necessities of the departments; in no way impose its Art to the hindrance of our convenience; it must confine its ornaments to subjects more or less connected with the objects of the building, as the Middle Age architects confined their ecclesiastical decorations in sacred edifices; it must be willing to use whatever material the skill of modern ages has placed at the disposal of the builder; and the arrangements of various kinds should not, on account of Gothic associations, be inferior in mechanical skill or other convenience, to the forms or methods now in general use.

Believing in these principles, I think the University was right in adopting our present design. I will not indulge myself further on

this topic, nor detain you with speculations on Gothic Art; an old college friend, and a very different hand, will presently do this in the letter which I shall read to you.

It remains only, therefore, to describe the general plan by which the union has been effected between the professorial demands and financial conditions on the one hand, and on the other, the requirements of Gothic Architecture, as interpreted by a refined and almost fastidious artist.

A few words will explain the principles which determined the kind of accommodation.

For the illustration of Nature the student requires four things: first, the work-room, where he may practically see and work for himself; secondly, the lecture-room, where he may see and be taught that which by himself he can neither see nor learn, and, as an adjunct to these, a room for more private study for each; thirdly, general space

for the common display of any illustrative specimens capable of preservation,—so placed, in relation to the rest of the building, as to be convenient for reference and comparison between all the different branches; and, lastly, a library, in which whatever has been done, or is now doing, in the science of this and other periods and countries, may be conveniently ascertained.

The centre of the edifice, which is to contain the Collections, consists of a quadrangle. This large area will be covered by a glass roof, supported on cast iron columns. The ornaments (due to the admirable skill and taste of Mr. Skidmore, of Coventry,) are in wrought iron. This is as it should be. The rigid (cast) material supports the vertical pressure; the malleable (wrought) iron is employed for the ornament, and is chiefly hand-wrought. The present is the second roof that has been erected; for it had been believed that a departure could be safely made from the original designs of Deane

and Woodward for the sake of lightness of form; and that for the same reason the supports might be made of wrought iron tubes. This experiment failed, and a structure on the principle of the original design has replaced the first attempt.

The wrought iron ornaments represent, in the large spandrils that occupy the interspaces between the arches of the principal aisles, large interwoven branches, with leaf and flower and fruit, of lime, chesnut, sycamore, walnut, palm, and other trees and shrubs, of native or of exotic growth; and in various parts of the lesser decorations, in the capitals, and nestled in the trefoils of the girders, leaves of elm, briar, water-lily, passion-flower, ivy, holly, and many others, which hereafter a catalogue will enumerate.

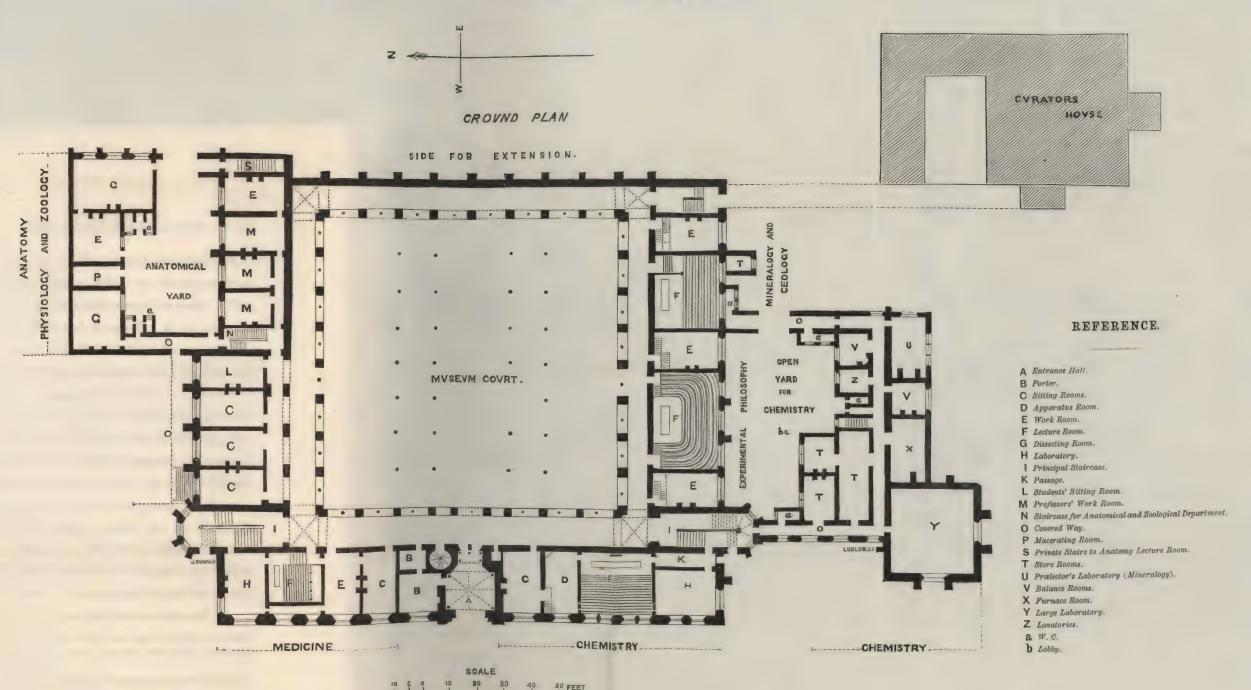
The central court is surrounded by an open arcade of two stories. This arcade furnishes ready means of communication between the

several departments and their collections in the area. The roof springs from above the upper arcade, so that the arcades on both floors are open to the covered court.

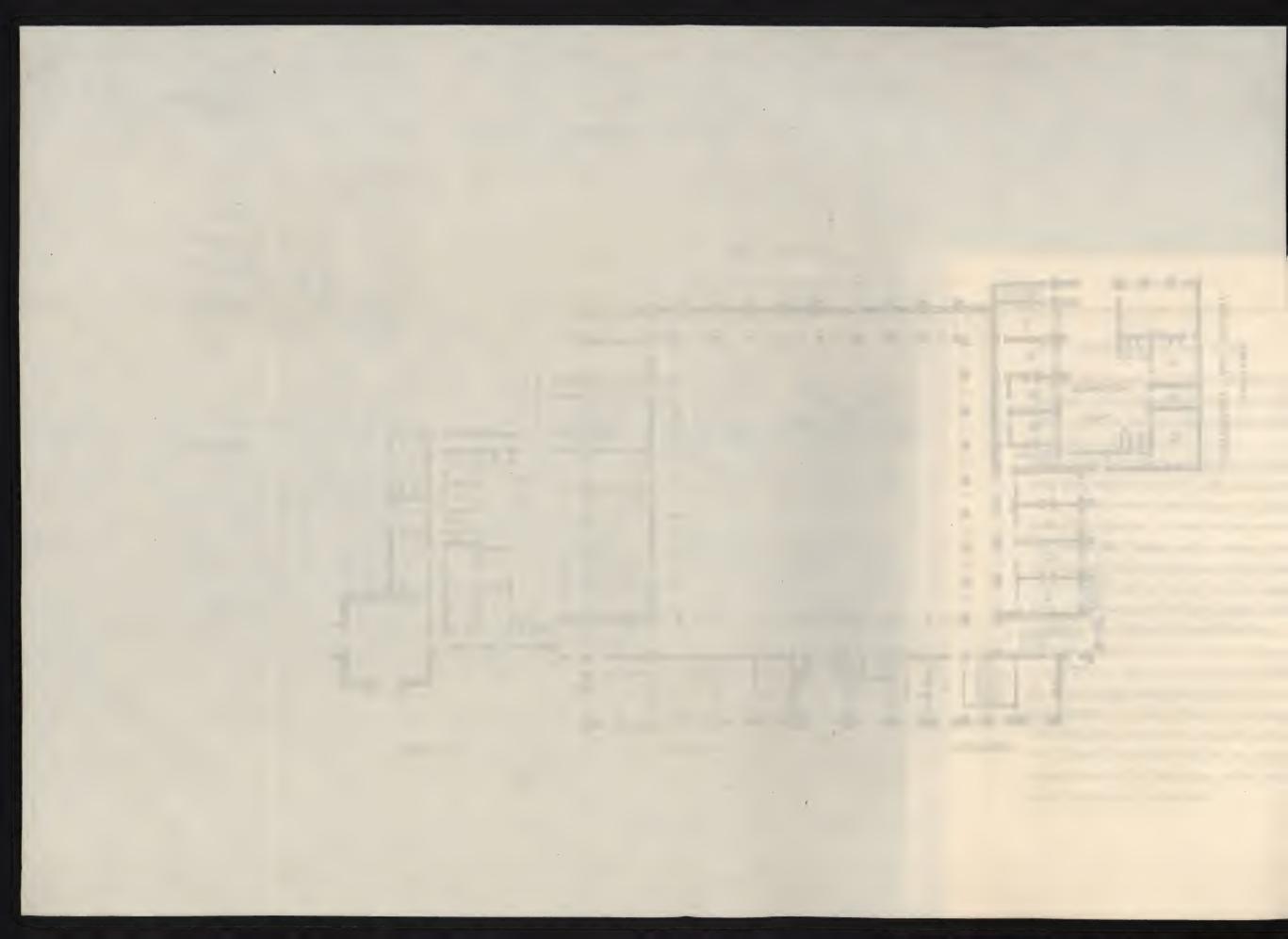
The arcade on the ground floor is entered from the centre of each side of the court, and ready communication is made from it to every part of the collection. In each of the arcades are seven piers forming eight openings, and carrying eight discharging arches, within which are two lesser arches, resting on their outer sides on the piers, and at their junction with each other on a shaft with a capital and base.

On the upper story there is a similar arrangement, excepting only that the piers and shafts are of less height, though the piers are of the same number; on this account, in the same horizontal space between each pier, four arches are supported by three shafts in the upper arcade, instead of as below, two arches supported at their union by one shaft.

OXFORD. VNIVERSITY. MVSEVM.



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There are, on the ground floor, thirty-three piers and thirty shafts—on the upper floor, thirty-three piers and ninety-five shafts. Thus one hundred and twenty-five shafts surround the court; and if we include the capitals and bases of the piers, there are one hundred and ninety-one capitals and bases.*

The shafts have been carefully selected, under the direction of the Professor of Geology, from quarries which furnish examples of many of the most important rocks of the British Islands. On the lower arcade, are placed, on the west side, the granitic series; on the east, the metamorphic; on the north, calcareous rocks, chiefly from Ireland; on the south, the marbles of England. In the upper floor, as far as may be, an analogous distribution is adopted.†

^{*} The number of shafts and piers on the side by which you enter, differs from the other three sides: hence the uneven numbers.

[†] Further particulars of these shafts, and of the arrangements of the plants represented in the capitals, will be given in the Appendix. See the admirable letter from Professor Phillips there given.

The capitals and bases will represent various groups of plants and animals, illustrating different climates and various epochs. They are mainly arranged according to their natural orders, and are the more required to represent the vegetable creation, as the botanical collections will remain, very properly, at the Botanical Gardens.

On massive corbels, projecting from the fronts of the piers, it is hoped, that there may be placed the statues of great men who first discovered, or first brought to important results, the several branches of knowledge which the edifice is intended to promote. In the mathematical department, Archimedes, Leibnitz, Newton; in astronomy, Hipparchus, Galileo; in geology, Cuvier; in chemistry, Lavoisier, Cavendish, Davy; in biology, Aristotle, Linnæus, John Hunter; in medicine, Hippocrates, Sydenham, Harvey; and on special, but very different grounds, as benefactors to the human race, Bacon, Volta, Oer-

sted, Watt, and Stephenson, will be among the first whose statues it is proposed to place here for the contemplation and example of all who may hereafter enter, with various purpose, this place of study and of work.

Here I must not omit to record that the expression in the architecture, by this simple and happy method, of the intentions of the building, was engrafted upon it as the work went on, and was not (I need hardly say) included in the first design, or in the original estimate. All this has since been added by the zealous munificence of many friends of our undertaking.*

I may be excused for repeating a public fact. Her Majesty Queen VICTORIA was made acquainted with the circumstance that these statues were to be gifts; and a hope was expressed that if Her Majesty thought fit to set

^{*} In an Appendix will be found the names of the donors of these statues, and of other contributors to the ornamentation of the building.

an example to contributors, she would choose as her donation the first of the modern school, himself an Englishman, Francis Lord Bacon. In reply, the royal, and, more also, the kindly announcement—reached the University, that not Bacon only, but the four great names that followed next on the proposed list of discoverers, should be executed by Her Majesty's command and at her own costs. And I know not but that this gracious act was enhanced in value, when it was made known by the Chancellor on the same occasion on which the Queen's gift was publicly announced, that the Undergraduates had offered to erect the monuments of Aristotle and Cuvier.

Several offers have been made to place inscriptions in carving or in colour on the walls of the corridors, in the libraries, or in the several departments. How curiously instructive some of these might be! Take two for example, in the Medical Department—this,

quaint saying and pregnant rebuke recorded by Stobæus:

"Τρόφιλος ἰατρὸς ἐρωτηθείς, τίς ἄν γένοιτο τέλειος ἰατρός" Ο τὰ δυνατὰ, ἔφη, καὶ τὰ μὴ δυνατὰ δυνάμενος διαγιγνώσκειν."

"Trophilus the physician being asked who is a perfect physician, gave answer, 'He who distinguishes between what can, and what cannot be done.'"

Then the weighty, but half-known words with which Hippocrates solemnly begins his instructions—

" Ο βίος βραχὺς, $\dot{\eta}$ δὲ τέχνη μακρ $\dot{\eta}$, \dot{o} δὲ καιρὸς ὀξὺς, $\dot{\eta}$ δὲ πεῖρα σφαλερ $\dot{\eta}$, $\dot{\eta}$ δὲ κρίσις χαλεπ $\dot{\eta}$."

"Life is short;
but
Art long;
Opportunities fleeting;
Experience deceitful;
True judgment difficult."

Or in yet more lofty strain, the words of Sir Thomas Browne—

"NATURE is the ART of GOD."

And who cannot add, from the best benefactors of mankind, similar terse greetings for the threshold of every avenue to natural knowledge?

Round the arcade is ranged upon three sides the main block of the building. The east is wisely left unencumbered by rooms, to afford ready means for future extension: land has been purchased, which will admit of such extension whenever it is required. I may not describe the main block in detail; you can visit such departments as you think fit. The most complete and largest is that of Chemistry, because the practical work of that extensive subject is likely to be here most extensively carried on. To every department is attached a lecture-room, a private room, and, wherever required, work-rooms and laboratories.

Beyond or outside the main block, to the north, because the coolest side, are an open yard for the Anatomical and Zoological departments, and beyond it, Dissecting-rooms. On the south side, are the rooms which require special

arrangements for experiments or light; a yard for purposes connected with Chemistry and Experimental Physics; and further still, out-buildings, containing workshops, furnace-rooms, weighing-rooms, and laboratories. Thus all noxious operations are removed from the principal pile, but joined with much convenience to the lecture-rooms, and communicating easily with the Central Court, common to all the departments.

The laboratory for the chemical students is the large detached building seen at the south-west angle of the Museum. The Abbot's kitchen at Glastonbury will be recognised by you as the prototype. There can be no more successful adaptation of an ancient example to modern wants, inasmuch as no more convenient nor more airy laboratory could be contrived, and certainly no bolder or more picturesque design.

On the upper floor are a large lecture-room

for 600 persons intended for occasional use; the Entomological collections of Mr. Hope; and along the front, the Library and Reading rooms, together 200 feet in length.

Concerning the libraries, to the honour of the Radcliffe Trustees (the Earl Bathurst, W. S. Dugdale, Esq., the Right Hon. S. Herbert, the Right Hon. W. E. Gladstone, and the Right Hon. T. H. Sotheron Estcourt), it must be said, that they have seriously before them the question whether they may not transfer their collections of Scientific Books to the new Scientific Institution. Here is not the place to enter into the arguments which are involved in the proposition; it is sufficient to say, that close by the Scientific Collections, some library of Scientific Literature is necessary. Wherever the Collections are, the students will be. The memory of the great physician will be doubly honoured, should the noble pile that bears his name, bear it still as the Radcliffe

Library; but marching as it were with the new wants of a new age, supply a splendid reading-room to the over-crowded Bodleian Library; while his funds and his literary stores begin a new life at the Museum. The Trustees will not probably be foiled in their endeavour to serve the best interests, both of their founders and of the University. Should they be so, however, there will be long and costly labour before the Museum is supplied with such a collection of illustrated works on all scientific subjects, of periodicals, and transactions; or endowed with so liberal funds for the maintenance of a library.

Lastly, I will but mention the graceful building which at the south-east angle gives a residence to the Curator. The elegance of its form, and the beauty of its many details, will long tell the tale, that the soul of one man, at least, did in this century answer to the subtle requirements of Gothic Art; and will say, in

unmistakeable terms, what that man might have accomplished, had ample means been ever placed at his command.

Here, then, I must stop,—but not before I have added, that while this building has been in progress, we have not been wholly unmindful of the hardy hands that worked for its erection. Alas! we can do little for each other, to ease the daily toil, and sweeten the hard-earned bread. But with the laying the foundation-stone we also erected a humble messroom by its side, where the workmen have daily met for their stated meals, have begun each day with simple prayers from willing hearts, have had various volumes placed for their use, and have received frequent instruction and aid from the chief officer in the building, Mr. Bramwell, our clerk of the works.

The temper of the Architect has reached the men. In their work they have had pleasure. The capitals are partly designed by the men themselves, and especially by the family of O'Shea, who bring wit and alacrity from the Emerald Isle to their cheerful task. The carving of the capitals and the decoration of the windows, limited, very limited, as our means have been, have raised ever living interest; and as strangers walk in the streets, ever and anon they hear the theme discussed by the workers who pass by.

May the work prosper!—and in many succeeding generations, when we are long forgetten, may young minds be here freshly learning and warmly loving the things which they may be allowed to perceive as in a mirror, dimly; but which we, by the ineffable grace of God, may, in ways at present unconceived, be then beholding, and knowing them then as they are known.

I have purposely avoided the expression of my sentiments on many points which interest me, lest I be, as perhaps I already am, tedious to you. I delay, therefore, no longer to read a letter which has just reached me from Mr. Ruskin.

" DEAR ACLAND,

"I have been very anxious, since I last heard from you, respecting the progress of the works at the Museum, as I thought I could trace in your expressions some doubt of an entirely satisfactory issue.

"Entirely satisfactory very few issues are or can be; and when the enterprise, as in this instance, involves the development of many new and progressive principles, we must always be prepared for a due measure of disappointment—due partly to human weakness, and partly to what the ancients would have called fate—and we may, perhaps, most wisely call the law of trial, which forbids any great good being usually accomplished without various compen-

sations and deductions, probably not a little humiliating.

"Perhaps in writing to you what seems to me to be the bearing of matters respecting your Museum, I may be answering a few of the doubts of others, as well as fears of your own.

"I am quite sure that when you first used your influence to advocate the claims of a Gothic design, you did so under the conviction, shared by all the seriously purposed defenders of the Gothic style, that the essence and power of Gothic, properly so called, lay in its adaptability to all need; in that perfect and unlimited flexibility which would enable the architect to provide all that was required, in the simplest and most convenient way; and to give you the best offices, the best lecture-rooms, laboratories, and museums, which could be provided with the sum of money at his disposal.

"So far as the architect has failed in doing this; so far as you find yourself, with the other professors, in anywise inconvenienced by forms of architecture; so far as pillars or piers come in your way, when you have to point, or vaults in the way of your voice, when you have to speak, or mullions in the way of your light, when you want to see; -just so far the architect has failed in expressing his own principles, or those of pure Gothic art. I do not suppose that such failure has taken place to any considerable extent; but so far as it has taken place, it cannot in justice be laid to the score of the style, since precedent has shown sufficiently, that very uncomfortable and useless rooms may be provided in all other styles as well as in Gothic; and I think if, in a building arranged for many objects of various kinds, at a time when the practice of architecture has been somewhat confused by the inventions of modern science, and is hardly yet organized completely with respect to the new means at his disposal; if, under such circumstances, and with somewhat limited funds, you have yet obtained a building in all main points properly fulfilling its requirements, you have, I think, as much as could be hoped from the adoption of any style whatsoever.

"But I am much more anxious about the decoration of the building; for I fear that it will be hurried in completion, and that, partly in haste and partly in mistimed economy, a great opportunity may be lost of advancing the best interest of architectural, and in that, of all other arts. For the principles of Gothic decoration, in themselves as simple and beautiful as those of Gothic construction, are far less understood, as yet, by the English public, and it is little likely that any effective measures can be taken to carry them out. You know, as well as I, what those principles are; yet it may be convenient to you that I should here state them briefly as I accept them myself, and have reason to suppose they are accepted by the principal promoters of the Gothic revival.

"I. The first principle of Gothic decoration is that a given quantity of good art will be more generally useful when exhibited on a large scale, and forming part of a connected system, than when it is small and separated. That is to say, a piece of sculpture or painting of a certain allowed merit, will be more useful when seen on the front of a building, or at the end of a room, and, therefore, by many persons, than if it be so small as to be only capable of being seen by one or two at a time; and it will be more useful when so combined with other work as to produce that kind of impression usually termed 'sublime'as it is felt on looking at any great series of fixed paintings, or at the front of a cathedralthan if it be so separated as to excite only a special wonder or admiration, such as we feel for a jewel in a cabinet.

"The paintings by Meissonier in the French Exhibition of this year were bought, I believe, before the Exhibition opened, for 250 guineas each. They each represented one figure, about 6 inches high—one, a student reading; the other, a courtier standing in a dress-coat. Neither of these paintings conveyed any information, or produced any emotion whatever, except that of surprise at their minute and dextrous execution. They will be placed by their possessors on the walls of small private apartments, where they will probably, once or twice a week, form the subject of five minutes' conversation while people drink their coffee after dinner. The sum expended on these toys would have been amply sufficient to cover a large building with noble frescoes, appealing to every passer by, and representing a large portion of the history of any given period. But the general tendency of the European patrons of art is to grudge all sums spent in

a way thus calculated to confer benefit on the public, and to grudge none for minute treasures of which the principal advantage is that a lock and key can always render them invisible.

"I have no hesitation in saying that an acquisitive selfishness, rejoicing somewhat even in the sensation of possessing what can not be seen by others, is at the root of this art-patronage. It is, of course, coupled with a sense of securer and more convenient investment in what may be easily protected and easily carried from place to place, than in large and immoveable works; and also with a vulgar delight in the minute curiosities of productive art, rather than in the exercise of inventive genius, or the expression of great facts or emotions.

"The first aim of the Gothic Revivalists is to counteract, as far as possible, this feeling on all its three grounds. We desire (A) to make art large and publicly beneficial, instead of small

and privately engrossed or secluded; (B) to make art fixed instead of portable, associating it with local character and historical memory; (C) to make art expressive instead of curious, valuable for its suggestions and teachings, more than for the mode of its manufacture.

"II. The second great principle of the Gothic Revivalists is that all art employed in decoration should be informative, conveying truthful statements about natural facts, if it conveys any statement. It may sometimes merely compose its decorations of mosaics, chequers, bosses, or other meaningless ornaments: but if it represents organic form (and in all important places it will represent it), it will give that form truthfully, with as much resemblance to nature as the necessary treatment of the piece of ornament in question will admit of.

"This principle is more disputed than the first among the Gothic Revivalists themselves. I, however, hold it simply and entirely, believ-

ing that ornamentation is always, cateris paribus, most valuable and beautiful when it is founded on the most extended knowledge of natural forms, and continually conveys such knowledge to the spectator.*

"III. The third great principle of the Gothic revival is that all architectural ornamentation should be executed by the men who design it, and should be of various degrees of excellence, admitting, and therefore exciting, the intelligent co-operation of various classes of workmen; and that a great public edifice should be, in sculpture and painting, somewhat the same as a great chorus in music, in which, while, perhaps, there may be only one or two voices perfectly trained, and of perfect sweetness (the rest being in various degrees weaker and less cultivated), yet all being ruled in harmony, and each sustaining a part consistent with its

^{*} A more detailed statement of this principle is given in a following letter.

strength, the body of sound is sublime, in spite of individual weaknesses.

"The Museum at Oxford was, I know, intended by its designer to exhibit in its decoration the working of these three principles; but in the very fact of its doing so, it becomes exposed to chances of occasional failure, or even to serious discomfitures, such as would not at all have attended the adoption of an established mode of modern work. It is easy to carve capitals on models known for four thousand years, and impossible to fail in the application of mechanical methods and formalised rules. But it is not possible to appeal vigorously to new canons of judgment without the chance of giving offence; nor to summon into service the various phases of human temper and intelligence, without occasionally finding the tempers rough and the intelligence feeble. The Oxford Museum is, I believe, the first building in this country which has had its ornamentation, in any telling parts, trusted to the invention of the workman: the result is highly satisfactory, the projecting windows of the staircases being as beautiful in effect as anything I know in civil Gothic: but far more may be accomplished for the building if the completion of its carving be not hastened; many men of high artistic power might be brought to take an interest in it, and various lessons and suggestions given to the workmen which would materially advantage the final decoration of leading features. No very great Gothic building, so far as I know, was ever yet completed without some of this wise deliberation and fruitful patience.

"I was in hopes from the beginning that the sculpture might have been rendered typically illustrative of the English Flora: how far this idea has been as yet carried out I do not know; but I know that it cannot be properly carried out without a careful examination of the available character of the principal genera, such as architects have not hitherto undertaken. The proposal which I heard advanced the other day, of adding a bold entrance-porch to the façade, appeared to me every way full of advantage, the blankness of the façade having been, to my mind, from the first, a serious fault in the design. If a subscription were opened for the purpose of erecting one, I should think there were few persons interested in modern art who would not be glad to join in forwarding such an object.

"I think I could answer for some portions of the design being superintended by the best of our modern sculptors and painters; and I believe that, if so superintended, the porch might and would become the crowning beauty of the building, and make all the difference between its being only a satisfactory and meritorious work, or a most lovely and impressive one.

"The interior decoration is a matter of much greater difficulty; perhaps you will allow me to defer the few words I have to say about it till I have time for another letter: which, however, I hope to find speedily.

> "Believe me, my dear Acland, "Ever affectionately yours,

"J. Ruskin."

The principles thus clearly enumerated by Mr. Ruskin are, on the main, those that animate the earnest student of Gothic. It is not for me especially to advocate Gothic Art, but only to urge, that if called into life, it should be in conformity to its own proper laws of vitality. If, week after week, in my youth, with fresh senses and a docile spirit, I have drunk in each golden glow that is poured by a Mediterranean sun from over the blue Ægean upon the Athenian Parthenon - if, day by day, sitting on Mars' Hill, I have watched each purple shadow, as the temple darkened in majesty against the evening sky—if so, it has been to teach me, as the alphabet of all Art, to love all truth and to hate all falsehood, and to kiss the hand of every Master who has brought down, under whatever circumstance, and in whatever age, one spark of true light from the Beauty and the subtle Law which stamp the meanest work of the Everliving, Everworking, Artist.

So, at least, here we have sought to hinder all ornament, unless that ornament be free from vicious carelessness; and to stop all professing transcript of Nature, unless it be painstaking, sagacious, and honest. Herein, we owe just debt of gratitude to the young school of Artists, called, half in jest, Pre-Raffaelites. Genuine Pre-Raffaelites lived but once. The yearning, half-graceless simplicity which made Raffaelle what he was, and which Raffaelle lived himself to lose, is, nevertheless, no simplicity after Raffaelle died. But faithful love of the Nature of God, and power to select by our reason, and

by a cultivated mind, that which is fit for human work, and which human skill can accomplish, is of all time—of our times, as well as of the days of Giotto, or of the almost matchless hand and heart of Van Eyck. Woe to us in the judgment of posterity, if, knowingly, because we care not, or unknowingly, because we see not, we either will not work faithfully in our Art ourselves, or cannot let others work who Rather do as we have done-carve one capital as well as we can, though that be feebly, -and so cheer one human heart, that his love in his daily work may be stamped on our and his behalf for centuries, rather than varnish the whole surface with endless design, which is too coarse to be an imitation of natural objects, and too mean and too often repeated, to be counted within the range of Art.

This, then, we have desired in our area; to represent some natural objects as our best workmen feel them; to do a few well; and to wait for completion to a future day, when the hewn blocks may be carved by the imagination, or in the reality, as our children will.

I must now, for the present, bid you and the Building farewell. With no wish to deprecate, but rather earnestly desiring your thorough criticism and your every counsel, I may still remind you that though, perhaps, not fully aware of the difficulties through which the Museum has become what it is, you cannot be more convinced of the imperfections which partly circumstances, partly our common nature, have stamped upon it, than are those who, for many years, trod each step towards its erection, before its Art was discussed, or even its Artist named.

SECOND LETTER FROM MR. RUSKIN.

MY DEAR ACLAND,

January 20, 1859.

I was not able to write, as I had hoped, from Switzerland, for I found it impossible to lay down any principles respecting the decoration of the Museum which did not in one way or other involve disputed points, too many, and too subtle, to be discussed in a letter. Nor do I feel the difficulty less in writing to you now, so far as regards the question occurring in our late conversations, respecting the best mode of completing these interior decorations. Yet I must write, if only to ask that I may

be in some way associated with you in what you are now doing to bring the Museum more definitely before the public mind - that I may be associated at least in the expression of my deep sense of the noble purpose of the building-of the noble sincerity of effort in its architect-of the endless good which the teachings to which it will be devoted must, in their ultimate issue, accomplish for mankind. How vast the range of that issue, you have shown in the lecture which I have just read, in which you have so admirably traced the chain of the physical sciences as it encompasses the great concords of this visible universe. But how deep the workings of these new springs of knowledge are to beand how great our need of them-and how far the brightness and the beneficence of them are to reach among all the best interests of men—perhaps none of us can yet conceive, far less know or say. For, much as I reverence physical science as a means of mental education (and you know how I have contended for it, as such, now these twenty years, from the sunny afternoon of spring when Ehrenberg, and you, and I, went hunting for infusoria in Christchurch meadow streams, to the hour when the prize offered by Sir Walter Trevelyan and yourself for the best essay on the Fauna of that meadow, marked the opening of a new era in English education) - much, I say, as I reverence physical science in this function, I reverence it, at this moment, more as the source of utmost human practical power, and the means by which the far distant races of the world, who now sit in darkness and the shadow of death, are to be reached and regenerated. At home or far away—the call is equally instant-here, for want of more extended physical science, there is plague in our streets, famine in our fields; the pest

strikes root and fruit over a hemisphere of the earth, we know not why; the voices of our children fade away into silence of venomous death, we know not why; the population of this most civilized country resists every effort to lead it into purity of habit and habitation,-to give it genuineness of nourishment, and wholesomeness of air, as a new interference with its liberty; and insists vociferously on its right to helpless death. All this is terrible; but it is more terrible yet that dim, phosphorescent, frightful superstitions still hold their own over two-thirds of the inhabited globe; and that all the phenomena of nature which were intended by the Creator to enforce His eternal laws of love and judgment, and which, rightly understood, enforce them more strongly by their patient beneficence, and their salutary destructiveness, than the miraculous dew on Gideon's fleece, or the restrained lightnings of Horeb — that all

these legends of God's daily dealing with his creatures remain unread, or are read backwards, into blind, hundred-armed horror of idol cosmogony.

How strange it seems that physical science should ever have been thought adverse to religion. The pride of physical science is, indeed, adverse, like every other pride, both to religion and to truth; but sincerity of science, so far from being hostile, is the pathmaker among the mountains for the feet of those who publish peace.

Now, therefore, and now only, it seems to me, the University has become complete in her function as a teacher of the youth of the nation to which every hour gives wider authority over distant lands; and from which every rood of extended dominion demands new, various, and variously applicable knowledge of the laws which govern the constitution of the globe, and must finally regulate the

industry, no less than discipline the intellect of the human race. I can hardly turn my mind from these deep causes of exultation to the minor difficulties which beset or restrict your undertaking. The great work is accomplished; the immediate impression made by it is of little importance; and as for my own special subjects of thought or aim, though many of them are closely involved in what has been done, and some principles which I believe to be, in their way, of great importance, are awkwardly compromised in what has been imperfectly done, - all these I am tempted to waive, or content to compromise, when only I know that the building is in main points fit for its mighty work. Yet you will not think that it was matter of indifference to me when I saw, as I went over Professor Brodie's chemical laboratories the other day, how closely this success of adaptation was connected with the choice of the style. It was very touching and wonderful to me. Here was the architecture which I had learned to know and love in pensive ruins, deserted by the hopes and efforts of men, or in dismantled fortress-fragments recording only their cruelty; -here was this very architecture lending itself, as if created only for these, to the foremost activities of human discovery, and the tenderest functions of human mercy. No other architecture, as I felt in an instant, could have thus adapted itself to a new and strange office. No fixed arrangements of frieze and pillar, nor accepted proportions of wall and roof, nor practised refinements of classical decoration, could have otherwise than absurdly and fantastically yielded its bed to the crucible, and its blast to the furnace; but these old vaultings and strong buttresses-ready always to do service to man, whatever his bidding-to shake the waves of war back from his seats of rock, or prolong through faint twilights of sanctuary,

the sighs of his superstition—he had but to ask it of them, and they entered at once into the lowliest ministries of the arts of healing, and the sternest and clearest offices in the service of science.

And the longer I examined the Museum arrangements, the more I felt that it could be only some accidental delay in the recognition of this efficiency for its work, which had caused any feeling adverse to its progress among the members of the University. The general idea about the Museum has perhaps been, hitherto, that it is a forced endeavour to bring decorative forms of architecture into uncongenial uses - whereas, the real fact is, as far as I can discern it, that no other architecture would, under the required circumstances, have been possible; and that any effort to introduce classical types of form into these laboratories and museums must have ended in ludicrous discomfiture. But the

building has now reached a point of crisis, and it depends upon the treatment which its rooms now receive in completion, whether the facts of their propriety and utility be acknowledged by the public, or lost sight of in the distraction of their attention to matters wholly external.

So strongly I feel this, that whatever means of decoration had been at your disposal, I should have been inclined to recommend an exceeding reserve in that matter. Perhaps, I should even have desired such reserve on abstract grounds of feeling. The study of Natural History is one eminently addressed to the active energies of body and mind. Nothing is to be got out of it by dreaming, not always much by thinking—everything by seeking and seeing. It is work for the hills and fields—work of foot and hand, knife and hammer—so far as it is to be afterwards carried on in the house, the more active and workmanlike our

proceedings the better, fresh air blowing in from the windows, and nothing interfering with the free space for our shelves and instruments on the walls. I am not sure that much interior imagery or colour, or other exciting address to any of the observant faculties, would be desirable under such circumstances. You know best; but I should no more think of painting in bright colours beside you, while you were dissecting or analysing, than of entertaining you by a concert of fifes and cymbals.

But farther—do you suppose Gothic decoration is an easy thing, or that it is to be carried out with a certainty of success at the first trial under new and difficult conditions? The system of the Gothic decorations took eight hundred years to mature, gathering its power by undivided inheritance of traditional method, and unbroken accession of systematic power; from its culminating point in the Sainte Chapelle, it faded through four hundred years

of splendid decline; now for two centuries it has lain dead—and more than so—buried; and more than so, forgotten, as a dead man out of mind; do you expect to revive it out of those retorts and furnaces of yours, as the cloudspirit of the Arabian sea rose from beneath the seals of Solomon? Perhaps I have been myself faultfully answerable for this too eager hope in your mind (as well as in that of others) by what I have urged so often respecting the duty of bringing out the power of subordinate workmen in decorative design. But do you think I meant workmen trained (or untrained) in the way that ours have been until lately, and then cast loose on a sudden, into unassisted contention with unknown elements of style? I meant the precise contrary of this; I meant workmen as we have yet to create them: men inheriting the instincts of their craft through many generations, rigidly trained in every mechanical art that bears on their materials, and familiarised from infancy with every condition of their beautiful and perfect treatment; informed and refined in manhood, by constant observation of all natural fact and form; then classed, according to their proved capacities, in ordered companies, in which every man shall know his part, and take it calmly, and without effort or doubt-indisputably well-unaccusably accomplished—mailed and weaponed cap-à-pie for his place and function. Can you lay your hand on such men? or do you think that mere natural good-will and good-feeling can at once supply their place? Not so-and the more faithful and earnest the minds you have to deal with, the more careful you should be not to urge them towards fields of effort, in which, too early committed, they can only be put to unserviceable defeat.

Nor can you hope to accomplish, by rule or system, what cannot be done by individual 72

taste. The laws of colour are definable, up to certain limits, but they are not yet defined. So far are they from definition, that the last, and, on the whole, best work on the subject (Sir Gardner Wilkinson's) declares the "colour concords" of preceding authors to be discords; and vice versa.

Much, therefore, as I love colour decoration when it is rightly given, and essential as it has been felt by the great architects of all periods to the completion of their work, I would not, in your place, endeavour to carry out such decoration at present, in any elaborate degree, in the interior of the Museum. Leave it for future thought: above all, try no experiments. Let small drawings be made of the proposed arrangements of colour in every room; have them altered on the paper till you feel they are right; then carry them out firmly and simply; but, observe, with as delicate execution as possible. Rough work is good in its place,

three hundred feet above the eye, on a cathedral front, but not in the interior of rooms, devoted to studies in which everything depends upon accuracy of touch and keenness of sight.

With respect to this finishing, by the last touches bestowed on the sculpture of the building, I feel painfully the harmfulness of any ill-advised parsimony at this moment. For it may, perhaps, be alleged by the advocates of retrenchment, that so long as the building is fit for its uses (and your report is conclusive as to its being so), economy in treatment of external feature is perfectly allowable, and will in no wise diminish the serviceableness of the building in the great objects which its designs regarded. To a certain extent this is true. You have comfortable rooms, I hope sufficient apparatus; and it now depends much more on the professors than on the ornaments of the building, whether or

not it is to become a bright or obscure centre of public instruction. Yet there are other points to be considered. As the building stands at present, there is a discouraging aspect of parsimony about it. One sees that the architect has done the utmost he could with the means at his disposal, and that just at the point of reaching what was right, he has been stopped for want of funds. This is visible in almost every stone of the edifice. It separates it with broad distinctiveness from all the other buildings in the University. It may be seen at once that our other public institutions, and all our colleges-though some of them simply designed—are yet richly built, never pinchingly. Pieces of princely costliness, every here and there, mingle among the simplicities or severities of the student's life. What practical need, for instance, have we at Christchurch of the beautiful fan-vaulting under which we ascend to dine? We might have as easily achieved the eminence of our banquets under a plain vault. What need have the readers in the Bodleian of the ribbed traceries which decorate its external walls? Yet, which of those readers would not think that learning was insulted by their removal? And are there any of the students of Balliol devoid of gratitude for the kindly munificence of the man who gave them the beautiful sculptured brackets of their oriel window, when three massy projecting stones would have answered the purpose just as well? In these and all other regarded and pleasant portions of our colleges, we find always a wealthy and worthy completion of all appointed features, which I believe is not without strong, though untraced effect, on the minds of the younger scholars, giving them respect for the branches of learning which these buildings are intended to honour, and increasing, in a certain degree, that sense of the value of delicacy and accuracy which is the first conditon of advance in those branches of learning themselves.

Your Museum, if you now bring it to hurried completion, will convey an impression directly the reverse of this. It will have the look of a place, not where a revered system of instruction is established, but where an unadvised experiment is being disadvantageously attempted. It is yet in your power to avoid this, and to make the edifice as noble in aspect as in function. Whatever chance there may be of failure in interior work, rich ornamentation may be given, without any chance of failure, to just that portion of the exterior which will give pleasure to every passer-by, and express the meaning of the building best to the eyes of strangers. There is, I repeat, no chance of serious failure in this external decoration. because your architect has at his command the aid of men, such as worked with the architects' of past times. Not only has the art of Gothic

sculpture in part remained, though that of Gothic colour has been long lost, but the unselfish—and I regret to say, in part self-sacrificing—zeal of two first-rate sculptors, Mr. Munro and Mr. Woolner, which has already given you a series of noble statues, is still at your disposal to head and systematise the efforts of inferior workmen.

I do not know if you will attribute it to a higher estimate than yours of the genius of the O'Shea family, or to a lower estimate of what they have as yet accomplished, that I believe they will, as they proceed, produce much better ornamental sculpture than any at present completed in the Museum. It is also to be remembered that sculptors are able to work for us with a directness of meaning which none of our painters could bring to their task, even were they disposed to help us. A painter is scarcely excited to his strength, but by subjects full of circumstance, such as it would

be difficult to suggest appropriately in the present building; but a sculptor has room enough for his full power, in the portrait statues, which are necessarily the leading features of good Gothic decoration. Let me pray you, therefore, so far as you have influence with the delegacy, to entreat their favourable consideration of the project stated in Mr. Greswell's appeal, the enrichment of the doorway, and the completion of the sculpture of the West Front. There is a reason for desiring such a plan to be carried out, of wider reach than any bearing on the interests of the Museum itself. I believe that the elevation of all arts in England to their true dignity, depends principally on our recovering that unity of purpose in sculptors and architects, which characterised the designers of all great Christian buildings. Sculpture, separated from architecture, always degenerates into effeminacies and conceits; architecture, stripped of

sculpture, is at best a convenient arrangement of dead walls; associated, they not only adorn, but reciprocally exalt each other, and give to all the arts of the country in which they thus exist, a correspondent tone of majesty.

But I would plead for the enrichment of this doorway by portrait sculpture, not so much even on any of these important grounds, as because it would be the first example in modern English architecture of the real value and right place of commemorative statues. We seem never to know at present where to put such statues. In the midst of the blighted trees of desolate squares, or at the crossings of confused streets, or balanced on the pinnacles of pillars, or riding across the tops of triumphal arches, or blocking up the aisles of cathedrals, in none of these positions, I think, does the portrait statue answer its purpose. It may be a question whether the erection of such statues is honourable to the erectors, but assuredly it is

not honourable to the persons whom it pretends to commemorate; nor is it anywise matter of exultation to a man who has deserved well of his country, to reflect that his effigy may one day encumber a crossing, or disfigure a park gate. But there is no man of worth or heart, who would not feel it a high and priceless reward that his statue should be placed where it might remind the youth of England of what had been exemplary in his life, or useful in his labours, and might be regarded with no empty reverence, no fruitless pensiveness, but with the emulative, eager, unstinted passionateness of honour, which youth pays to the dead leaders of the cause it loves, or discoverers of the light by which it lives. To be buried under weight of marble, or with splendour of ceremonial, is still no more than burial; but to be remembered daily, with profitable tenderness, by the activest intelligences of the nation we have served, and to have power granted even to the

shadows of the poor features, sunk into dust, still to warn, to animate, to command, as the father's brow rules and exalts the toil of his children. This is not burial, but immortality.

There is, however, another kind of portraiture, already richly introduced in the works of the Museum; the portraiture, namely, of flowers and animals, respecting which I must ask you to let me say a few selfish, no less than congratulatory words:-selfish, inasmuch as they bear on this visible exposition of a principle which it has long been one of my most earnest aims to maintain. We English call ourselves a practical people; but, nevertheless, there are some of our best and most general instincts which it takes us half-centuries to put into practice. Probably no educated Englishman or Englishwoman has ever, for the last forty years, visited Scotland, with leisure on their hands, without making a pilgrimage to Melrose; nor

have they ever, I suppose, accomplished the pilgrimage without singing to themselves the burden of Scott's description of the Abbey. Nor in that description (may it not also be conjectured?) do they usually feel any couplets more deeply than the—

"Spreading herbs and flowerets bright Glistened with the dew of night. No herb nor floweret glistened there But was carved in the cloister arches as fair."

And yet, though we are raising every year in England new examples of every kind of costly and variously intended buildings—ecclesiastical, civil, and domestic—none of us, through all that period, had boldness enough to put the pretty couplets into simple practice. We went on, even in the best Gothic work we attempted, clumsily copying the rudest ornaments of previous buildings; we never so much as dreamed of learning from the monks of Melrose, and seeking for help beneath the

dew that sparkled on their "gude kail" garden.*

Your Museum at Oxford is literally the first building raised in England since the close of the fifteenth century, which has fearlessly put to new trial this old faith in nature, and in the genius of the unassisted workman, who gathered out of nature the materials he needed. I am entirely glad, therefore, that you have decided on engraving for publication one of O'Shea's capitals;† it will be a complete type of the whole work, in its inner meaning, and far better to show one of them in its completeness, than to give any reduced sketch of the build-

* "The monks of Melrose made good kail On Friday, when they fasted."

The kail leaf is the one principally employed in the decorations of the abbey.

 \dagger See vignette title-page. The capital represents the following ferns :— $\!\!\!\!\!\!^{4}$

Scolopendrium vulgare, Blechnum boreale, Filix mas. ing. Nevertheless, beautiful as that capital is, and as all the rest of O'Shea's work is likely to be, it is not yet perfect Gothic sculpture; and it might give rise to dangerous error, if the admiration given to these carvings were unqualified.

I cannot, of course, enter in this letter into any discussion of the question, more and more vexed among us daily, respecting the due meaning and scope of conventionalism in treatment of natural form; but I may state briefly what, I trust, will be the conclusion to which all this "vexing" will at last lead our best architects.

The highest art in all kinds is that which conveys the most truth, and the best ornamentation possible would be the painting of interior walls with frescoes by Titian, representing perfect Humanity in colour; and the sculpture of exterior walls by Phidias, representing perfect Humanity in form. Titian and Phidias are

precisely alike in their conception and treatment of nature—everlasting standards of the right.

Beneath ornamentation, such as men like these could bestow, falls in various rank, according to its subordination to vulgar uses or inferior places, what is commonly conceived as ornamental art. The lower its office, and the less tractable its material, the less of nature it should contain, until a zig-zag becomes the best ornament for the hem of a robe, and a mosaic of bits of glass, the best design for a coloured window. But all these forms of lower art are to be conventional only because they are subordinate:-not because conventionalism is in itself a good or desirable thing. All right conventionalism is a wise acceptance of, and compliance with, conditions of restraint or inferiority; -it may be inferiority of our knowledge or power—as in the art of a semi-savage nation; or restraint by reason of material—as 86

in the way the glass painter should restrict himself to transparent hue, and a sculptor deny himself the eyelash and the film of flowing hair, which he cannot cut in marble;—but in all cases whatever, right conventionalism is either a wise acceptance of an inferior place, or a noble display of power under accepted limitation: it is not an improvement of natural form into something better or purer than Nature herself.

Now this great and most precious principle may be compromised in two quite opposite ways. It is compromised on one side, when men suppose that the degradation of a natural form which fits it for some subordinate place is an improvement of it; and that a black profile on a red ground, because it is proper on a water-jug, is therefore an idealization of Humanity, and nobler art than a picture of Titian. And it is compromised equally gravely on the opposite side, when men refuse to sub-

mit to the limitation of material and the fitnesses of office; -- when they try to produce finished pictures in coloured glass, or substitute the inconsiderate imitation of natural objects for the perfectness of adapted and disciplined design.

There is a tendency in the work of the Oxford Museum to err on this last side; unavoidable, indeed, in the present state of our art-knowledge-and less to be regretted in a building devoted to natural science than in any other: nevertheless, I cannot close this letter without pointing it out, and warning the general reader against supposing that the ornamentation of the Museum is, or can be as yet, a representation of what Gothic work will be, when its revival is complete. Far more severe, yet more perfect and levely, that work will involve, under sterner conventional restraint, the expression not only of natural form, but of all vital and noble natural law. For the truth of decoration is never to be measured by its imi-

tative power, but by its suggestive and informative power. In the annexed spandril of the iron-work of our roof, for instance, the horsechesnut leaf and nut are used as the principal elements of form: they are not ill-arranged, and produce a more agreeable effect than convolutions of the iron could have given, unhelped by any reference to natural objects. Nevertheless, I do not call it an absolutely good design; for it would have been possible, with far severer conventional treatment of the iron bars, and stronger constructive arrangement of them, to have given vigorous expression, not of the shapes of leaves and nuts only, but of their peculiar radiant or fanned expansion, and other conditions of group and growth in the tree; which would have been just the more beautiful and interesting, as they would have arisen from deeper research into nature, and more adaptive modifying power in the designer's mind, than the mere leaf termination of a rivetted scroll.



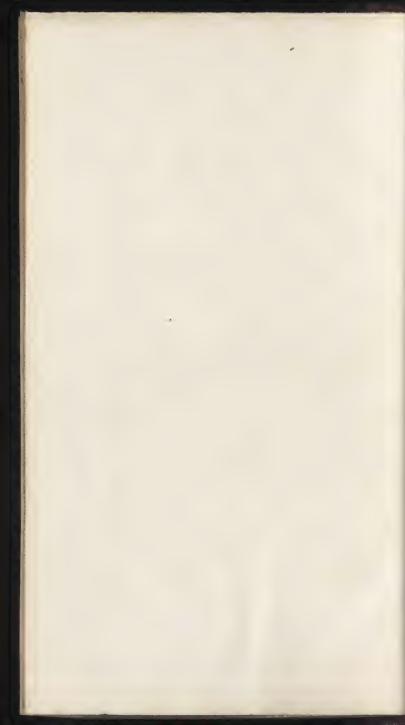
I am compelled to name these deficiencies, in order to prevent misconception of the principles we are endeavouring to enforce; but I do not name them as at present to be avoided, or even much to be regretted. They are not chargeable either on the architect, or on the subordinate workmen; but only on the system which has for three centuries withheld all of us from healthy study; and although I doubt not that lovelier and juster expressions of the Gothic principle will be ultimately arrived at by us, than any which are possible in the Oxford Museum, its builders will never lose their claim to our chief gratitude, as the first guides in a right direction; and the building itself—the first exponent of the recovered truth—will only be the more venerated the more it is excelled.

Believe me, my dear Acland,

Ever affectionately yours,

J. Ruskin.

APPENDICES.



APPENDIX A.

LETTER FROM PROFESSOR PHILLIPS.

MY DEAR ACLAND, Oxford, Jan. 21, 1859.

I Lose no time in stating very concisely the purpose we had in view, when it was proposed to place shafts of British marbles in the corridors of the Museum, and to crown them with capitals of natural objects. A few words are appended to show in what degree we are able to effect the object, and the method on which we proceed.

The British marbles are still only partially known. Including in the term marbles something more than the "marmora" of our early mineralogists, and including granitic rocks, serpentines, &c., we desired to obtain specimens of all the more important kinds—important

on grounds of scientific interest, as well as for their commercial value and architectural utility. Here and there our efforts failed; we could not "for love or money" get the stone we wanted; but on the whole our success is much beyond any previous example in this, and, I believe, in any country.

In the arrangement of the many valuable and curious examples of polishable stones, which the liberality of our friends has enabled us to bring together, we have always desired to employ so much of system as to make these ornamental parts of the fabric really and obviously useful, as a part of the exhibition of natural objects. Regarding the rocks as of aqueous or igneous origin, and of unequal geological date, we wished to exhibit these relations in our building, by giving to each group an appropriate place. It was found, after great efforts, possible to accomplish this to a considerable extent, but not quite so

perfectly as was hoped. The principal reason is that we could not obtain certain marbles known 150 and more years since, to complete our series of mesozoic limestones.

If now you will stand in the centre of the great court, and turn your eyes to the west, "solis ad occasum," you will see, in the lower range of shafts, six fine examples of granite and its twin brother syenite. First, on the left, Aberdeen gray granite, surmounted by the sculptured capital of Alismaceous plants; next, Aberdeen red granite, crowned by the Butomaceæ; then the largely porphyritic gray granite of Lamorna, with a capital of the date palm. On the other side of the entrance, stands my special column of syenite from Charnwood Forest, with the cocoa-palm for its crown; then the beautiful mottled granite of Cruachan, elaborated for us by the Marquis of Breadalbane, the capital being Pontederaceæ; and finally, the red granite of Ross in Mull, the gift of the Duke of Argyll, whose capital is Liliaceous.

I don't at all intend to lead you so slowly round the remainder of the quadrangle. On the north you see eight shafts, all from Ireland or Devonshire, all belonging to palæozoic, stratified, or metamorphic rocks. At the extreme are the beautiful marbles of Torquay and Marychurch — between them the green serpentinous marbles of Galway, and red and black tinted limestones of Cork, Limerick, &c. The capitals will be Acotyledonous—(see the splendid fern sculpture above Marychurch shaft)—or Monocotyledonous, as Gramineæ, Acoraceæ, &c.

Now turn to the east, and behold a second set of igneous and metamorphic rocks, to face the old granites and porphyries. Here, on the left (next to Marychurch column) you see your own Killerton rock (ancient — how ancient!) lava, crowned with Zamiaceæ, from

which peeps the Didelphys; next the Rock of Trerice, its capital will be a thorny Zamia; then Roche gives a shaft to be capped by Cupressinæ; next are two serpentines with capitals of Abietinæ and Araucarinæ; Inverara porphyry follows, and supports sculptured branches of Taxaceæ. St. Leven's porphyry and black serpentine complete this series, and are to bear on their heads plants of the orders Smilaceæ and Dioscoraceæ.

On the south, you have a beautiful and pretty well known series of English and Welsh marbles, mostly of the carboniferous limestone, but including what are less commonly seen, the breccia of Mendip and the gypsum of Chellaston. The plants destined to furnish capitals for these are the Monocotyledonous orders, as Orchidaceæ, Musaceæ, Iridaceæ, &c.

Thus have we thirty shafts of the larger size placed, with their thirty capitals executed or planned. Besides the thirty capitals we

have to provide sixty corbels, and are doing this so as to add to each capital a neighbour bearing some natural affinity to it. Only in one instance has this been departed from; it is in the corbel of the Malvaceæ, close by the Filices—a case of two quite different groups wonderfully executed, and looking at each other with mutual admiration!

Now, ascend to the upper corridor, and survey the smaller shafts, to the number of ninety-six, which appear on its four sides. As yet no capitals are carved on them. Beginning on the west side, and following the same order as for the shafts below, you find the whole corridor (twenty-four shafts) occupied by granite, porphyry, serpentine, &c. Among them are granites of Aberdeen, Criffel, and Cornwall—porphyritic granites of remarkable richness (often called porphyry), elvans, porphyries, and various quartzose compounds.

The capitals for these shafts will be all

selected from the Corolliflorous division of Dicotyledonous plants.

The northern upper corridor is wholly filled with marbles from the carboniferous limestone and older rocks of Ireland, including the serpentine of Galway. The capitals will exemplify Monochlamydeous plants and Rhizanths.

On the western side the series of shafts is varied. It was not found possible to obtain for this side all the marbles formerly known and used in the Oolitic and Wealden districts of England; and some of the bays have been filled with other rocks which it was desirable to exhibit. At the extremities we have from Nottinghamshire, Derbyshire, and Somersetshire, specimens of the Permian limestones, triassic breccia, and gypsum—in the centre are granites of Jersey and Cornwall—flanked by columns of slate and shafts of lias, blue and white; marbles of Purbeck, Stamford, and Buckingham.

The capitals of these shafts will be designed from the Thalamiflorous division of the Dicotyledonous plants.

Lastly, on the south side is a series of the finest rocks belonging to the carboniferous and Devonian limestones of England and Wales, including the crinoidal marble of Dent (the birthplace of Sedgwick, who gives the shaft), the various marbles of Durham, Derbyshire, Plymouth, Torquay, Anglesea, and South Wales. It will be interesting to compare these with the coëval rocks of Ireland, which stand opposite to them. The capitals of these will be ornamented by Calyciflorous Dicotyledons.

Thus, as far as possible, the representations of plants (varied here and there by animals geographically and naturally associated with them), will be placed, with so much of system as to help the memory, and will be sculptured with so much attention to their natural habit,

as to satisfy the botanist as well as the artist, neither of whom can expect the most skilful human hand to express in rough stone, by means of hard steel, all the delicacy and grace which, with finer materials and by finer processes, the Great Artificer moulds the lilies of the field and the leaves of the forest.

I need not remind you that with this view of the utility and meaning of the arrangement of our subjects, the architects (who have been very zealous in their efforts to make the whole successful) have been always able to combine what is due to the building as a work of art; nor am I aware that their opinions and ours have been in the least degree difficult to reconcile. We must not forget the sculptors, who have worked with singular zeal and ability. Finally, this is not a haphazard collection of pretty stones crowned by pretty flowers, but a selection of marbles and sculptures, intended to illustrate points of some interest and importance in

science and art. Upon the whole, you will probably not regret to have given so much time and attention to this matter; all that is told me confirms my own opinion that it was well worth while to make this trial to combine grace with utility, and that the result will not be disappointing to those who have given us money for our work, and, what is more precious, their full confidence that we should use it with liberality and prudence.

Ever yours truly,

JOHN PHILLIPS.

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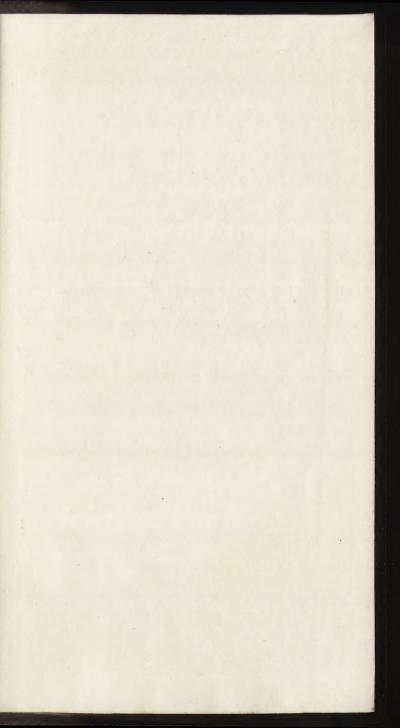
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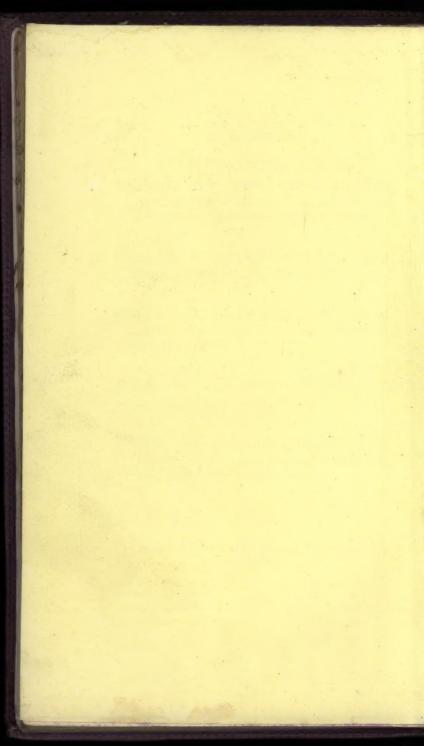
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